

METHOD AND SYSTEM FOR REMOVAL OF NOX AND MERCURY  
EMISSIONS FROM COAL COMBUSTION

ABSTRACT OF THE DISCLOSURE

A method to reduce emissions in flue gas due to combustion of coal in a combustion unit including the steps of: combusting coal in a primary combustion zone of the combustion unit; releasing elemental mercury from the combustion into the flue gas; injecting  $\text{NH}_4\text{Cl}$ ,  $\text{NH}_4\text{Br}$ , or  $\text{NH}_4\text{I}$  into the flue gas; oxidizing the elemental mercury with halogen from the additive; adsorbing the oxidized mercury generated by the combustion of the coal with an adsorbent in the flue gas, and collecting the adsorbent with the oxidized mercury in a combustion waste treatment system.